

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

TITLE V REVISED DRAFT PERMIT NO. V-05-025 R1

Griffin Industries, Inc.

Russellville Plant

Russellville, Kentucky 42276

OCTOBER 7, 2005

BEN MARKIN, REVIEWER

SOURCE I.D. #: 021-141-00026

SOURCE A.I. #: 2753

ACTIVITY #: APE20040002

CURRENT PERMITTING ACTION: SIGNIFICANT REVISION-V-054-025R1

Griffin Industries, Inc., was issued a draft Title V permit on *April 25, 2005*, and comments were received from the permittee on May 27, 2005. The comments indicate that the permit did not include usage of On-Specification (On-Spec) fuel as approved by the Division's letter dated March 1, 1999, and the removal of Animal Feeding Operations (AFO) requirements from the permit because the facility does not process animal feed. The On-Spec oil shall be burned in the two indirect heat exchangers. Also, the units are capable of burning waste cooking oil (WCO), which has lower emissions than the #6 fuel oil. Griffin requested permitting action so that On-Spec, WCO or #6 fuel oil could be burnt in the units. In the initial Title V application Griffin assumed the injection of ammonia to the cooling tower, and was granted the usage of 152 lb/hr based on dispersion modeling analysis by the Division and the state's rescinded toxics Regulation 401 KAR 63:022. Upon recent visitation to the site by Cabinet staff and the inspection of records maintained by the facility, the Division concurs that the cooling tower should be classified as insignificant. The reason is that ammonia is not injected or processed at the facility, and is only used as a cleaner (which results in the trace quantities detected in the water from the cooling tower, which can be stripped or emitted to the air). With removal of the ammonia injection, 401 KAR 63:022 or 401 KAR 63:021, is no longer applicable to the facility.

PAST PERMITTING ACTION: INITIAL SOURCE WIDE PERMIT- V-05-025

An operating permit application was received from Griffin Industries, Inc. on December 14, 1997 and was called complete on February 12, 1998. Griffin Industries operates a rendering facility and finished product handling at the Russellville facility in Logan County, Kentucky. In the rendering facility (E.U. 003) animal by-product materials are processed into tallow, grease, and high protein meat and bone meal. In addition, the facility operates two (2) residual oil-fired indirect heat exchangers (E.U. 001 & E.U 002) with heat input of 50 mmBtu/hr each, and a cooling tower. The emissions of ammonia from cooling tower (E.U. 004) operations are contingent upon the amount of water cooled per unit time, which is in turn contingent upon the amount of finished product processed.

COMMENTS:

Based on the information provided, the Division concluded that 401 KAR 59:015 applies to the indirect heat exchangers that were constructed after 1972, 401 KAR 59:010 and 401 KAR 53:010 apply to the rendering processes, 401 KAR 52:090 and 40 CFR 279 applies to On-Spec Fuel Oil.

E.U 001 & 002, Indirect Heat Exchangers:

Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.329 lb/mmBtu actual heat input, each. Pursuant to 401 KAR 59:015, Section 4(2), visible emissions from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average, except that a maximum of 40% opacity, based on a six-minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot. Pursuant to KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 1.16 lb/mmBtu actual heat input, each.

The permittee shall monitor the heating and sulfur content of residual oil of each shipment received. The permittee may use fuel supplier certification to meet this requirement. The permittee shall maintain the records of the fuel analysis; the amount of fuel combusted on a monthly basis; the monthly sulfur dioxide emissions and summarize them on a 12-month rolling average.

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from each stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated of control equipment for any and all necessary repairs.

The permittee shall submit a schedule within six months from the issuance of this permit to conduct at least one performance test for particulate matter and sulfur dioxide within one year following the issuance of this permit.

E. U. 003: Rendering processes and finish product

Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions into the open air shall not exceed $[3.59(P)^{0.62}]$ lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. For compliance with the PM emission limit, an emission factor of 1.43 lbs PM/ton of raw material processed through the unit shall be used, based on the 1992 Air Pollution Engineering Manual, p. 523 (assuming maximum raw material processing rate through the unit), until new information is gathered from the stack tests that shall be performed within one year from issuance of the proposed permit. Emission factors derived from stack testing are to replace the emission factor currently listed in the emissions inventory database, and shall be used to calculate future emissions.

Pursuant to 401 KAR 59:010, Section 3(1)(a), any continuous emissions into the open air shall not equal or exceed 20% opacity based on a six-minute-average. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from each stack are seen (not including condensed water vapor within the plume), then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated of control equipment for any and all necessary repairs.

In order to be in compliance with 401 KAR 53:010, the mixture of 1 volume of ambient air mixed with 7 volumes of odorless air at any given time, must have no detectable odor.

The permittee shall report exceedances of Hydrogen Sulfide over 100 pounds in any 24 hour period to the Division's Regional Office listed on the front cover. (AFO Consent Agreement in Federal Register Vol. 70 No. 19, Dated January 31, 2005)

Type of control and efficiency

The rendering process is equipped with venturi scrubber/packed tower scrubber as well as a room air scrubber.

E. U 004: Cooling Tower

Pursuant to KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not limited to the installation and utilization of hoods, fans, and fabric filters to enclose and vent the emissions generated from the processing of dust generating materials, or use of water sprays or other measures to suppress the dust emissions during handling. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive emissions beyond the property line is prohibited.

The permittee shall monitor the amount of ammonia injected and processed on a monthly basis. Compliance with the requirements of 401 KAR 63:021 is demonstrated if the rates of ammonia usage per hour and year established in the Title V application are not exceeded.

Emissions were calculated based on AP 42. The results of the analysis are summarized in the air quality analysis and indicate that the standards will not be exceeded. Since this review has disclosed that all requirements will be met, the preliminary determination is that an operating permit may be issued as conditioned, but contingent to the satisfactory resolution of any adverse public comments which might be received. Additional information used in making this review was obtained from existing limitations on file records.

APPLICABLE REGULATIONS:

401 KAR 53:005, General Provisions;
401 KAR 53:010, Ambient Air Quality;
401 KAR 59:010, New Process Operations;
401 KAR 59:015, New Indirect Heat Exchangers applicable to an emission unit with a capacity less than 250 mmBtu per hour and commenced on or after April 9, 1972;
401 KAR 63:010, Fugitive Emissions;
40 CFR 279, Standards for the Management of Used Oil.

NON-APPLICABLE REGULATIONS DUE TO APPLICABILITY DATE OR SIZE OF THE UNIT:

401 KAR 60:005, New Source Performance Standards incorporating by reference 40 CFR 60 Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, applicable to an emission unit with a design maximum heat input capacity of 100 mmBtu/hour or less and greater than or equal to 10 mmBtu/hour and constructed after June 9, 1989. Based on the clarification letter dated February 25, 1998, from U.S. EPA to the director of Division for Air Quality, Kentucky, both boilers permitted under permits S-94-031 and S-00-137 (EU 001 and EU 002), are exempted from 40 CFR 60, Subpart Dc applicability. See Attachment E.

EMISSION AND OPERATING CAPS DESCRIPTION:

To preclude the applicability of Prevention of Significant Deterioration (PSD) of Air Quality, 401 KAR 51:017, source wide sulfur dioxide emissions shall not exceed 225 tons per year.

Pursuant to 40 CFR 279 and 40 CFR 761.20, On-Spec Fuel Oil shall not exceed the levels below

On-Spec Used Oil Specifications

<u>Constituent/Property</u>	<u>Allowable Level</u>
<u>Arsenic</u>	<u>5 ppm maximum</u>
<u>Cadmium</u>	<u>2 ppm maximum</u>
<u>Chromium</u>	<u>10 ppm maximum</u>
<u>Lead</u>	<u>100 ppm maximum</u>
<u>Total Halogens</u>	<u>1,000 ppm maximum</u>
<u>Flash Point</u>	<u>100 °F minimum</u>
<u>PCBs</u>	<u>Note (2)</u>

NOTE (1) Compliance Demonstration:

The facility shall demonstrate compliance with the on-spec used oil specification by using approved EPA or ASTM test methods or a certified on-specification used oil analysis upon the Cabinet's request. Documentation shall be maintained on site to show that it meets the standard.

NOTE (2) On-Spec used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm. The analysis and recordkeeping apply to each amount prior to blending even if it is to be blended with 90% virgin oil.
2. Used oil containing a PCB concentration of greater than or equal to 2 ppm shall not be burned.

OPERATIONAL FLEXIBILITY:

None

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.

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ATTACHMENT A

COMPANY COMMENTS AND DIVISION RESPONSES

Comments on Griffin Industries, Inc. Russellville Plant Draft Title V Air Quality Permit submitted by Micheal Schmidt, Corporate Environmental Coordinator.

Comment #1 – Fuel Designations in Permit

Griffin operates two oil-fired boilers at the Russellville facility, each with a design heat input capacity of 50.2 MMBtu/hr (EU001 and EU002). Typically, these boilers are fired with No. 6 fuel oil; however, other lower grade (and thereby lower emitting) fuel oils may also be used. The boilers are also capable of being fired with waste cooking oil (WCO), which also has a lower emission profile than No. 6 fuel oil. As there is no statutory or regulatory restriction that would limit the two existing boilers to firing No. 6 fuel oil grade only, Griffin requests that references to fuels in the permit encompass the broader fuel oil flexibility allowed including “On-Spec” Used Oil and Waste Cooking Oil (WCO). Requested changes in this regard are shown in the marked-up copy of the draft permit documents in Attachment 1.

Division’s response: The permit has been modified to include the On-Spec Used Oil and Waste Cooking Oil usage. The Division concurs on the usage of low-grade fuel oils provided the sulfur percent by weight shall not exceed 0.5 and meets the ASTM standards. Therefore the unit description has been modified.

Comment #2 – Administrative Correction to Boiler Heat Input Capacity

Page 11 of 20 of the draft permit references the two oil-fired boilers at the facility (EU001 and EU002) as “(2) 50 MMBtu/hr” boilers. It appears the actual design heat input capacities of these units has been rounded down. Griffin requests that the references to the heat input capacity of the boilers throughout the permit and supporting documents be changed to reference the actual heat input capacity, i.e., “(2) **50.2** MMBtu/hr” boilers. Refer to mark-ups of the draft permit documents in Attachment 1.

Division’s Response: The editorial errors have been corrected.

Comment #3 – Fuel Oil Usage Limit

Based on its location and industry classification, the major source threshold under the Prevention of Significant Deterioration (PSD) program for the Russellville facility is **250 tpy**. The facility is currently regulated as a synthetic minor source under the PSD program with sulfur dioxide (SO₂) from fuel oil combustion being the limiting pollutant in this classification. To make enforceable the facility’s minor source classification, Griffin has accepted a limit on the sulfur content that can be present in the fuel oils combusted of **0.5% by weight**. Now that there are only two boilers on site, this operating limit alone is sufficient to limit potential SO₂ emissions to well below 250 tpy, as demonstrated in the following sample calculation.

Maximum design heat input capacity of each boiler:	50.2 MMBtu/hr
Heat input capacity for #2 oil-fired space heaters:	2 MMBtu/hr

Maximum facility-wide boiler heat input capacity:	102.4 MMBtu/hr
Typical heating value for No. 6 fuel oil:	150 MMBtu/10 ³ gallons ¹
Mass-balance based SO ₂ emission factor:	157 S lb/10 ³ gallons ²
Maximum fuel oil sulfur content permitted:	0.5 %

$$\text{Potential SO}_2 \text{ Emissions (tpy)} = \left(\frac{102.4 \text{ MMBtu}}{\text{hr}} \right) \left(\frac{10^3 \text{ gal}}{150 \text{ MMBtu}} \right) \left(\frac{157 \times 0.5 \text{ lb}}{10^3 \text{ gal}} \right) \left(\frac{\text{ton}}{2,000 \text{ lb}} \right) \left(\frac{8,760 \text{ hr}}{\text{yr}} \right) = 234.7 \text{ tpy}$$

KDAQ's policy is that PSD avoidance emission limits should generally be set at 90% of the major source threshold (i.e., 225 tpy in this case) in order to ensure an adequate compliance margin. However, in the case of a pure mass-balance-based calculation approach, in which all sulfur in the fuel is assumed to be emitted as SO₂, there is no uncertainty in the emission factor and thus such a compliance margin is not necessary. Further, actual SO₂ emissions from the two boilers at the facility will be well below potential emission levels as the boilers do not operate 8,760 hour per year at 100% capacity utilization.

In Condition T-1 of the draft permit (Page 3 of 20), KDAQ has prescribed the 0.5% sulfur content limit, but also added a second redundant and unnecessary limit on the annual fuel oil usage. For the reasons set forth above, Griffin requests that the fuel oil usage limit be removed. Similarly, references to a fuel oil usage limit in the Permit Application Summary Form and Permit Statement of Basis should also be stricken. Refer to mark-ups to the draft permit documents in Attachment 1.

The potential SO₂ emissions in the Permit Application Summary Form should also be revised. Currently, the form lists a potential SO₂ emission rate of 245.59 tpy. Based on the calculation above, this should be revised to 234.7 tpy.

Division response: The Division concurs and the permit has been modified.

Comment #4 – Change to Visual Monitoring Provision for Boilers

Both oil-fired boilers at the Russellville facility are subject to a 20% opacity standard under 401 KAR 59:015 Section 4 (2). Griffin employs good combustion practices and maintains the boilers to ensure compliance with this limit. Based on their design, age, and types of fuel oils fired, some degree of visible emissions, equivalent to around 5% opacity, is normal for these units. Condition T-4.3 (Page 13 of 20) requires that Griffin perform a daily visual observation of the stacks on each boiler and, if any visible emissions are seen, conduct an EPA Reference Method 9 opacity test. Because some visible emissions are normal for this boiler, this condition, though following KDAQ's standard wording convention, would have the affect of requiring that Griffin conduct a Method 9 opacity test on the boilers nearly every day. Griffin asserts that this is an unduly and unwarranted administrative burden. Day-to-day variability of opacity from these boilers is minimal. Therefore, Griffin requests that Condition T-4.3 be modified as follows to require the follow-up Method 9 opacity test only when visual emissions observed are greater than normal.

¹ U.S. EPA, AP-42 5th Edition, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, September 1998, Chapter 1, Table 1.3-2 footnote "d".

² U.S. EPA, AP-42 5th Edition, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, September 1998, Chapter 1, Table 1.3-1 (Boilers < 100 MMBtu/hr, No. 6 oil-fired). Note, the AP-42 factor is a simplification of a mass balance equation based on a typical oil density of 7.85 lb/gal.

T-4.3: “**Weather permitting**, the permittee shall perform a qualitative visible observation of the opacity emission from the stack on a daily basis and maintain a log of the observation. If **an abnormal degree of** visible emissions from the stack are seen, then the opacity shall be determined by EPA reference Method 9 and **the permittee shall** initiate an inspection of the ~~control equipment~~ **unit** for any necessary repairs. [401 KAR 52:020 Section 10]”

Division’s Response: The Division concurs in part of the comment and the change in monitoring. While the suggested monitoring might suffice for the requirement for the facility, it does not necessarily address the compliance demonstration for opacity reading. Monitoring for the units is also necessary information to determine emissions from the unit, and to meet the regulatory obligation. Although these units have no control devices, in order to show compliance with 401 KAR 50:055, Section 2, the permittee is required to operate and maintain the facility in a manner consistent with good air pollution control practice minimizing emissions. Therefore, the Division considers the monitoring of opacity as means to ensure that the air pollution emitting device meets this obligation.

Comment #5 – Modification to Stack Test Requirement for Boilers

Condition T-6 (Page 13 of 20) requires that Griffin conduct a performance test for SO₂ and particulate matter (PT) on both boilers during the first year of the permit term. Griffin first requests that the requirement to conduct an SO₂ test be removed for the following reasons:

Neither boiler is equipped with an SO₂ control device. As discussed earlier in Comment #3, the SO₂ emissions from these boilers can be conservatively calculated on a pure mass-balance basis by assuming that all sulfur in the oil fired is emitted as SO₂. Thus, a performance test would yield no relevant or additional information as to the compliance status of these units.

Each boiler is subject to an SO₂ emission standard of 1.16 lb/MMBtu under 40 KAR 59:015 Section 5(1). However, the permit also limits the sulfur content of fuels fired to 0.5%. This second limit subsumes the first since at this sulfur content, it is not theoretically possible to violate the 401 KAR 59:015 standard. As shown below, the maximum SO₂ emissions possible are 0.52 lb/MMBtu. Thus, no compliance demonstration method beyond keeping records of the fuel sulfur contents is necessary.

$$\text{Maximum SO}_2 \text{ Emissions (lb/MMBtu)} = \left(\frac{0.5 \text{ lb S}}{100 \text{ lb oil}} \right) \left(\frac{7.85 \text{ lb oil}}{\text{gal oil}} \right) \left(\frac{10^3 \text{ gal oil}}{150 \text{ MMBtu}} \right) \left(\frac{64 \text{ lb SO}_2}{32 \text{ lb S}} \right) = 0.52 \text{ lb/MMBtu}$$

Griffin secondly requests that the requirement to conduct a PT performance test be modified to allow for the submission of PT tests that Griffin has conducted on similar sized and configured boilers at its other rendering facilities. PT emissions from oil combustion in uncontrolled boilers are generally similar between equivalent sized boilers firing the same sulfur content oil, as is evidenced by the fact that EPA assigns its highest “A” or “B” rating to PT emission factors for No. 6 fuel oil combustion in external combustion units in its AP-42 compilation document. In addition, based on these same AP-42 emission factors, the two boilers at the Russellville facility would be expected to have PT emissions of 10 lb/10³ gallons, equivalent to 0.067 lb/MMBtu.3

3 U.S. EPA, AP-42 5th Edition, Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, September 1998, Chapter 1, Table 1.3-1 (Boilers < 100 MMBtu/hr, No. 6 oil-fired).

This is roughly 20% of the applicable standard of 0.32 lb/MMBtu. In such a circumstance where a high compliance margin exists, use of representative test data should be allowed.

Based on these comments, Griffin requests that Condition T-6 (Page 13 of 20) be reworded as follows:

*T-6: The permittee shall submit a schedule within six months from the issuance of this permit to conduct at ~~least~~ **least** one performance test for particulate matter ~~and sulfur dioxide~~ within one year following the issuance of this permit. **In lieu of scheduling and conducting the performance test, the permittee may submit for approval a representative performance test conducted on a similarly sized and configured fuel oil-fired boiler at another facility owned and operated by the permittee. [401 KAR 50:045]***

Division's response: The Division concurs in part with the permittee on the performance testing for sulfur dioxide however the performance testing to include only particulate matter emissions standard will not be changed.

Comment #6 – Compliance Demonstration Method for Rendering Process

Condition L-1 (Page 14 of 20) specifies a PT emission standard for the rendering process per 401 KAR 59:010. This rule limits PT emissions as a function of the process weight rate. For process weights up to 30 ton/hr, the limit is $3.59 \times P^{0.62}$, as is noted in Condition L-1. At a production rate of 55,900 lb/hr, this corresponds to a PT standard of 28.3 lb/hr. To demonstrate compliance with this limit, KDAQ has established conditions that require production records to be applied to a site-specific PT emission factor derived from a newly required performance test. In addition, KDAQ is requiring that a weekly visual observation of the rendering process exhaust be completed.

Griffin asserts that compliance with the PT emission standard under 401 KAR 59:010 is implicit and no testing or monitoring is warranted. PT emissions are negligibly low and certainly well below the level allowed by the applicable standard. Consider the following points:

The rendering process is essentially a process of removing moisture from the raw materials (animal by-products). There is no combustion or other mechanisms that generate particulate matter in this process. The only PT emissions present are from small quantities of condensable organic compounds that may become entrained in the air exhaust stream of the steam-heated cooker.

Reflecting the fact that the rendering process is not a significant source of PT emissions, agencies in other states where Griffin operates facilities have generally not regulated PT from the rendering process. Some states, such as Indiana, do not even define the rendering process as an emission unit in the Title V permit.

To minimize odors, exhausts from the rendering process are routed through a venturi scrubber followed by two packed tower scrubbers. Although intended and operated for odor control only, the venturi scrubber also provides some level of control for the small amount of PT emissions that may be present in the rendering process exhaust stream.

Even in the absence of any odor control system, the PT emissions from the rendering process would be well below the levels allowed under 401 KAR 59:010.

Griffin conducted a PT performance test on the rendering process at its facility in Butler, Kentucky in February 2004. With an identical cooker and scrubbers similar to those at Russellville, the Butler facility average PT measured emissions were 0.23 lb/hr. This test showed that PT emissions were around 1% of the applicable standard.

While not disputing the applicability of 401 KAR 59:010 to the rendering process, KDAQ should consider the justification provided here for eliminating any new testing and monitoring requirements for the rendering process. This would involve the following changes to the permit language:

The Compliance Demonstration wording under Condition L-1 should be removed and replaced with the following: “Compliance with the allowable particulate standard is implicitly achieved based on the nature of the raw materials handled and the design of the process.”

Condition T-4.1 should be removed.

Condition T-5 should be removed.

Condition T-8 should be removed.

Division’s response: The Division acknowledges the comment but the allowable limit will not be removed from the permit. The fact that other states do not define rendering, is a moot point for discussion. The Division has evaluated the testing result from the Butler plant and concurs that particulate matter emissions from the unit is below the allowable levels. Therefore the testing requirements in the permit will be removed. However, the monitoring, recording and record keeping will be retained in the permit for compliance demonstration with 401 KAR 52:020, Section 10.

Comment #7 – Clarification of Odor Standard Applicability

Conditions T-2 and T-3 (Page 15 of 20) cite the odor standard at 401 KAR 53:010 as an applicable requirement. This is a state enforceable requirement only and should be labeled as such in the permit. Also, to ensure that obligations under the permit are clear and that conditions are not duplicative in their requirement, Griffin requests that Condition T-2 be reworded as follows:

T-2: “Ambient Air Quality Standards. [401 KAR 53:010] (State Enforceable Only) This condition is only a statement of applicability. The applicable standard is contained within Condition T-3.”

To clarify when the odor standard applies, Griffin also requests that Condition T-3 be reworded to include reference to 401 KAR 53:005 Section 2(2) as follows:

T-3: “The mixture of 1 volume of ambient air mixed with 7 volume units of odorless air ~~at any given time~~, must have no detectable odor. This odor standard shall be applicable only when the Cabinet receives a complaint with respect to odors from the source. [401 KAR 52:010, 401 KAR 53:005 Section 2(2)] (State enforceable only)

Division response: The Division concurs and the permit has been modified.

Comment #8 – Correction Regarding Applicability of AFO Requirements

Condition T-6 (Page 16 of 20) cites an H₂S emission standard derived from a voluntary consent agreement issued by EPA on January 31, 2005 to Animal Feeding Operations (AFO).⁴ It is clearly stated in the supplementary information section of the cited document that the agreement is being offered to

⁴ 70 Federal Register 4958, January 31, 2005.

animal feeding operations in the egg, broiler, chicken, turkey, dairy, and swine industries that meet the definition of an AFO under the Clean Water Act. Griffin does not now, nor have we ever operated an animal feeding operation at the Russellville facility. This citation was added to the permit in error and should be removed. Refer to mark-ups of the permit and statement of basis provided in Attachment 1.

Division response: The Division has deleted the requirements from the permit.

Comment #9 – Removal of Cooling Tower as a Significant Emission Unit

The Cooling Tower at the Russellville facility was historically added as an emission unit in previous permits based on what Griffin believes was a misapplication of 401 KAR 63:022 to this process. One of the constituents covered by this air toxic regulation, which has been repealed, was ammonia. Ammonia is a residual component found in trace quantities in the biological treatment lagoons at the Russellville facility. Because some of the water from the lagoons is utilized in the cooling tower, small amounts of ammonia can be stripped and emitted to the air. However, ammonia is not injected, processed, or otherwise used at the facility or in the cooling tower. Emissions of ammonia from the cooling tower are negligible and not reasonably quantifiable.

The draft Title V permit carries forward a 152 lb/hr emission limit for ammonia present in an older air permit for the facility.⁵ However, this emission limit has no relation to the actual amount of ammonia emissions that may be emitted. Griffin believes this emission limit originated from a screening dispersion modeling analysis conducted by KDAQ to back-calculate what the maximum ammonia emissions could be based on the allowable ambient standard in 63:022. 401 KAR 63:021 specifies that limits previously taken under the now-repealed 63:022 rule can be relaxed if the source “*can demonstrate that a condition is no longer necessary to protect human health and the environment*”. Griffin asserts that the ammonia emission limit is not necessary to protect human health and in fact represents a misunderstanding the agency has had about the nature of the cooling tower operations that has simply been carried forward. Griffin would like to take the opportunity of the Title V permit to correct this issue. We therefore request that Condition T-3 and T-5 be removed.

Assuming KDAQ concurs that an ammonia standard for the Cooling Tower is nonsensical and the historical 63:022 conditions are removed, then there no longer would be any unit-specific requirements applicable to this process. Further, potential emissions of all criteria pollutants would be such that the process would qualify as an insignificant activity. Thus, Griffin requests that the Cooling Tower be moved to the Insignificant Activities section of the Title V permit. Changes reflecting this request are covered in the mark-ups to the permit documents provided in Attachment 1.

Division response: The Division has removed the cooling tower as an emission unit and added it to the insignificant activities. The reason is that inspection carried out by the field and the central office representatives of the Division concluded that there were only trace amount of ammonia in the water from the cooling tower.

Comment #10 – Administrative Changes to Insignificant Activities Section

There are a few grammatical, spelling, and other administrative mistakes present in the Insignificant Activities section of the permit that Griffin requests be corrected. Refer to the mark-ups on the permit provided in Attachment 1.

Division's Response: The editorial errors have been corrected.

⁵ Permit O-88-021, issued April 29, 1988.

Comment #11 – Facility Description Correction

Griffin requests that the second sentence under the Source Description section of the Permit Application Summary Form and Permit Statement of Basis be reworded as follows.

Griffin Industries operates a rendering facility ~~and finishing product at the~~ in Russellville, ~~facility in~~ Logan County, Kentucky.

Division's Response: The editorial errors have been corrected.

Comment #12 – Combustion of “On-Spec” Oil

In the discussion covering EU001 and EU002 under the “Comments” section of the Permit Statement of Basis, Griffin requests that a new paragraph be added referencing the ability of the facility to burn “On-spec” used oil and waste cooking oil. Following is suggested language to be added:

The burning of “on-specification” used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

- a. “On-Specification” used oil is defined as that which meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below:*

On-Spec Used Oil Specifications Note (1)	
<u>Constituent/Proper ty</u>	<u>Allowable Level</u>
<u>Arsenic</u>	<u>5 ppm maximum</u>
<u>Cadmium</u>	<u>2 ppm maximum</u>
<u>Chromium</u>	<u>10 ppm maximum</u>
<u>Lead</u>	<u>100 ppm maximum</u>
<u>Total Halogens</u>	<u>1,000 ppm maximum</u>
<u>Flash Point</u>	<u>100 °F minimum</u>
<u>PCBs</u>	<u>Note (2)</u>

NOTE (1) The facility shall demonstrate compliance with the on-spec used oil specification by using approved EPA or ASTM test methods or a certified on-specification used oil analysis upon the Cabinet's request. Documentation shall be maintained on site to show that it meets the standard.

NOTE (2) On-Spec used oil may be fired as follows:

- At any time provided the maximum concentration of PCBs shall be less than 2 ppm. The analysis and recordkeeping apply to each amount prior to blending even if it is to be blended with 90% virgin oil.
- Used oil containing a PCB concentration of greater than or equal to 2 ppm shall not be burned during startup or shutdown periods.

Division's Response: The Division acknowledges that On-Spec Used Oil usage was approved. However, this information was not added to the initial Draft Title V Permit. Therefore, the details above have been added to the permit for re - advertisement.